

SKRAMTAYEV, B.G., professor; SHISHKIN, A.A., kandidat tekhnicheskikh nauk;
ORLYANKIN, N.M., inzhener; BUDILOV, A.A., inzhener.

Use of coarsely porous concrete for building walls under winter conditions.
Stroi.prom. vol. 31 no.9:20-21 S '53. (MLRA 6:9)
(Concrete construction--Cold weather conditions)

130 DTL 6V, P. 1
SKRAMTAYEV, B.G., professor, doktor tekhnicheskikh nauk; BUDILOV, A.A.,
kandidat tekhnicheskikh nauk

New data on the manufacture of rapid-hardening high-strength
concrete varieties made of tough concrete mixtures. Bet. 1
shel.-bet. no. 6:226-227 S '55. (MIRA 8:9)
(Concrete)

SKRAMTAYEV, B.G., professor, doktor tekhnicheskikh nauk; SHUBENKIN, P.F., dotsent, kandidat tekhnicheskikh nauk; ~~HUDILOV, A.A., kandidat tekhnicheskikh nauk.~~

Methods of obtaining rapid hardening, high-strength concrete. Stroi. prom. 33 no.2:34-35 F '55. (MIRA 8:4)
(Concrete)

SKRAMTAYEV, B.; BUDILOV, A., dotsent, kandidat tekhnicheskikh nauk.
~~skramtayev, B.; budilov, A.~~

Quick-hardening and high-strength concretes made of stiff concrete mixtures. Stroitel' 2 no.7:25 J1 '56. (MIRA 10:1)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR. (for Skramtayev).

(Concrete)

BUDILOV, A. I. A.

USSR/Chemical Technology. Chemical Products and Their Application -- Silicates.
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5321

Author: Skramtayev, B., Budilov, A.

Institution: None

Title: Fast Hardening and High Strength Concretes from Stiff Concrete Mixes

Original

Publication: Stroitel', 1956, No 7, 25

Abstract: A brief discussion of the fundamental problems of preparation of
stiff concrete mixes and making articles therefrom.

*Depstrel'myy chlen akademii
stroitel'stra i arkhitektury
SSSR.*

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BUDILOV, A.A.

SKRAMTAYEV, B.G., professor, doktor tekhnicheskikh nauk; SHUMENKIN, P.F., dotsent, kandidat tekhnicheskikh nauk; BUDILOV, A.A., dotsent, kandidat tekhnicheskikh nauk.

New method for determining tensile strenght of concrete. Stroi.
prom. 35 no.3:37-40 Mr '57. (MLRA 10:4)
(Concrete--Testing)

BUDILOV, A.A.

28-58-1-8/34

AUTHORS: Skramtayev, B.G., Doctor of Technical Sciences, Shubenkin, P.F., Candidate of Technical Sciences, and Budilov, A.A., Candidate of Technical Sciences

TITLE: Standard Calculation Method for Concrete Mixtures (Yedinyy metod rascheta sostava betona)

PERIODICAL: Standartizatsiya, 1958, # 1, pp 24-28 (USSR)

ABSTRACT: A standard calculation method for concrete mixtures does not exist in the USSR, although the necessity of such method was pointed out at the 4th All-Union Conference on the Problems of Concrete in 1948. At present, more than ten methods are in use and more have been suggested. All the formulas suggested since the end of the last century and (including the two formulas of Professor N.M. Belyayev and the Swiss concrete specialist Bolomey (transliterated), now in use), as well as the method recommended at the 1948 conference, are briefly mentioned and criticized.

The authors suggest a calculation method that can be used as a general standard. The method was developed during the course of investigations made by the authors since 1950, and consists of an introduction of new coefficients into

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Standard Calculation Method for Concrete Mixtures

28-58-1-8/34

previously used equations, along with two graphs.
There are 2 graphs and 2 tables.

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DUDILOV, H.D.

AUTHOR: Pflaumer, O.E., Candidate of Technical Sciences SOV/97-59-1-10/18
TITLE: Definition of Strength of Concrete in Tension Using Compressed
Cylindrical Testing Samples (Opredeleniye na szhimayemykh
tsilindricheskikh obraztsakh prochnosti betona pri rastyazhenii)
PERIODICAL: Beton i Zhelezobeton, 1959, Nr 1, pp 33-36 (USSR)

ABSTRACT: The strength of concrete during tensioning can be obtained with satisfactory accuracy using cylindrical testing samples of 15 mm diameter and 30 cm length, loaded longitudinally (as illustrated in Fig.2), and 15 mm wide and 3 mm thick pads. In a similar way the strength of natural stones during elongation can be defined, but in this case the cylindrical stone samples have a diameter of 5 cm. The method described has many advantages, and standardization is advocated. Fig.1 gives the types and sizes of various non-standardized testing samples as used at present for definition of the strength of concrete during tensioning. In 1947 F. Carneiro (Brazil) devised a new method of testing the strength of concrete in Card 1/3 tension, which considerably reduces the shortcomings of

SOV/97-59-1-10/18
 Definition of Strength of Concrete in Tension Using Compressed
 Cylindrical Testing Samples

existing methods. This new method is based on the Hertz principle of distribution of stresses in a thin circular disk compressed on the perimeter by two forces (see Fig.3). Fig.4 shows characteristics of the distribution of tensions in a cylinder. Various tests have been carried out in Russia (A.D. Osipov: "Definition of the limit of strength of concrete at compression", published in Gidrotekhnicheskoye stroitel'stvo 1956, Nr 8; and B.G. Skramtayev, P.F. Shubenkin and A.A. Budilov: "New method for the definition of strength of concrete during tensioning" in Stroitel'naya promyshlennost', 1958, Nr 3) and abroad. Tests carried out both in England and by the Institute for Building Materials ASiA SSSR are described in detail. Fig.5 shows cylindrical samples undergoing actual tests. Fig.6 shows graphs of the relationship between the strength of concrete during compression and tension carried out according to NiTU-123-55. In 1957 the Institute of Building Materials carried out three comparative tests to establish the strengths of various marks of concrete during tensioning, using (a) tensioned Card 2/3 rectangular samples, (b) bent rectangular samples,

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Definition of Strength of Concrete in Tension Using Compressed
Cylindrical Testing Samples

and (c) cylindrical samples. The composition of concrete mixes, the time of hardening, the strength of the concrete samples at the time of testing, and the strength in compression, are tabulated. Before the mechanical tests, the homogeneity of the concrete of all samples was tested by means of ultrasound. Both foreign and Russian tests prove the worth of the method of defining the strength of concrete during tensioning shown in Fig.2. There are 6 figures and 1 table.

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TRUGMAN, Mark Iosifovich; BUDILOV, A.I.

[Practical aid for establishing technical standards of labor]
Prakticheskoe posobie po tekhnicheskomu normirovaniu truda.
Riga, Latviiskoe gos.izd-vo, 1959. 179 p. (MIRA 14:12)
(Job analysis) (Labor productivity)

15-57-10-15067
Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10,
p 290 (USSR)

AUTHOR: Budilov, G.

TITLE: Putting out Peat Fires (Tusheniye torfyanogo
pozgara)

PERIODICAL: Pozharnoye delo, 1957, Nr 2, pp 12-14

ABSTRACT: The author describes a fire that started in June 1956 at the Chisto-Barskoye torfopredpriyatiye (peat firm) (Gor'kovskaya oblast'), probably spontaneously, in a vehicle filled with cut peat. He notes that the work of putting out the fire occupied 1000 men, 44 automatic pumps, and 6 fire engines, and that the total consumption of water for the fire amounted to about 1000 liters per second. He describes the system of fire-fighting water supply of the firm, the conditions attending the fire, and the measures taken to put out the fire. It is shown that the fire was extinguished

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Putting out Peat Fires (Cont.)

15-57-10-15067

by spray and by a continuous stream and that this practice confirmed
the inadequacy of the spray of water alone.

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B. E. Fridman

BUDILOV, G.; ORGIN, S.

In new conditions. Pozh.delo 3 no.12:5 D '57.
(Yaroslavl Province--Fire prevention)

(MIRA 10:12)

DEKHTEREV, Vladimir Vladimirovich; BUDILOV, G.S., red.; UCHITEL', I.Z.,
red.isd-vs; NAZAROVA, A.S., tekhn.red.

[Gas masks used in fire extinction; types, composition of ab-
sorbents, maintenance and operation] Protivogazy, primenyaemye
v pozharnoi okhrane; ustroistvo, sodержanie, ekspluatatsiia.
Moskva, Izd-vo M-va kommun.khoz.RSFSR, 1959. 106 p.

(MIRA 13:9)

(Gas masks) (Fire departments--Equipment and supplies)

BUDILOV, G.S.

Fire at an oil refinery. Pozh.delo 6:15-17 Mr '60.(MIRA 13:6)
(Petroleum refineries--Fires and fire prevention)

KOSYKH, Ivan Stepanovich; BUDILOV, G.S., nauchn. red.

[Instructions for firemen concerning gas and smoke protection measures] Pozharnomi o gazodymozashchitnoi sluzhbe.
Moskva, Stroiizdat, 1965. 51 p. (MIRA 18:10)

BUDILOV, V. I., (Engr)

Dissertation: "Spillways in Combined Hydroelectric Power Stations." Cand
Tech Sci, Moscow Order of Lenin Power Engineering Inst ineni V. M. Molotov,
28 May 54. Vechernyaya Moskva, Moscow, 19 May 54.

SO: SUM 284, 26 Nov 1954

V. K. BUDILOV, L. I. DORMAN, V. I. IVANOV, Ye. V. KOLMEYETS, L. Y. MIROSHNICHENKO

Small Flares and the Propagation of Solar Cosmic Rays in Interplanetary Space.

report submitted for the 8th Intl. Conf. on Cosmic Rays (IUPAP), Jaipur India,
2-14 Dec 1963

BUDILOVA, Ye.A.; USIYEVICH, M.A., professor, redaktor; MIKHNEVICH, D.Ye., redaktor.

[I.M.Sechenov and I.P.Pavlov in the struggle for materialism; recommended reading list] I.M.Sechenov i I.P.Pavlov v bor'be za materialism; rekomendatel'nyi ukazatel' literatury. Nauchn. red. M.A.Usievicha. Moskva, Gos. ordena Lenina biblioteka SSSR im V.I. Lenina, 1954. 122 p. (MLRA 7:8)

(Sechenov, Ivan Mikhailovich, 1829-1905) (Pavlov, Ivan Petrovich, 1849-1936)

BUDILOVA, Ye. A.

AUTHOR: Budilova, Ye. A., Candidate of Philosophical Sciences. 30-8-32/37

TITLE: On Problems of the Psychology of Knowledge (Voprosy psikhologii poznaniya).

PERIODICAL: Vestnik Akademii Nauk SSSR, 1957, Vol. 27, Nr 8, pp. 113-114 (USSR)

ABSTRACT: The Philosophical Institute of the AN held a conference (Moscow, May 20 - 22), which was attended by a large number of philosophers, pedagogists, and representatives of scientific institutes. S. L. Rubinshteyn spoke about the working plan of the department of psychology, of which he was the head. The discussion which developed in the course of the conference was quite in keeping with the interesting subject under discussion. The reviews may be divided into two groups: a) Those dealing with the problem of sensorial perception, and b) the problems dealing with the process of thinking. The most difficult problems were broached from the psychological point of view. The speakers Anan'yev, Sokolov, and Bekker dealt with the most recent experimental results obtained by physiological and psychological research. A particularly lively discussion was caused by the re-

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On Problems of the Psychology of Knowledge.

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ports delivered by Natadze and Nyuberg. They dealt with the "constancy theory" and, in this connection, with the reports concerning investigations of the problem of the perception of colors (and color variations) by the human eye and the reproduction of impressions received by speech. The problem of psychological pedagogy was also dealt with by a number of speakers

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BUDILOVA, Ye. P. and SHISHKIN, N. S.

"Computations of the Quantity of Condensed Moisture in Convective Clouds".
Trudy Gl. geofiz. observ., No 47, pp 49-52, 1954.

A method for calculating the water capacity with the aid of the aerological diagram is proposed by the author. From the diagram is found the change in specific humidity of saturated air during ascent along the wet adiabat. This change represents the quantity of moisture (in grams per kilogram) which can be condensed in a given layer. The possible water content (in grams per cubic meter) is found by division of the amount of the change in humidity into the density of air. Since the water content depends upon the base and upon the temperature at the level of the cloud base, such computations are carried out for various initial conditions.

The water content of clouds at first increases with altitude, and then decreases the faster the lower the temperature of the cloud base; here the dependence of water content on temperature of the lower base is practically linear. The actual water content of clouds can deviate from the computed in consequence of deviation of the vertical temperature gradient in a cloud from the wet-adiabatic, the evaporation of drops from the cloud's periphery, and the displacement of cloud masses of various density, and also in consequence of the fall of cloud particles and precipitation. The latter three factors can substantially change the

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magnitude of the computed water content. The largest ratio of computed and actual water contents evidently can be observed in the central portion of rapidly developing convective clouds.
(RZhGeol, No 9, 1955)

SO: Sum No 884, 9 Apr 1956

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ANAPOL'SKAYA, L.Ye.; BUDILOVA, Ye.P.

Winds prevailing in the areas of Novosibirsk and Krasnoyarsk
Reservoirs. Trudy GGO no.131:15-28 '62. (MIRA 15:6)
(Novosibirsk Reservoir region--Winds)
(Krasnoyarsk Reservoir region--Winds)

L 63025-65 EWT(1)/FCC GW

ACCESSION NR: AT5016807

UR/2531/65/000/176/0060/0068

AUTHORS: Budilova, Ye. P.; Lenshin, V. T.

TITLE: Mapping of maximum vertical velocities in clouds in its application to forecasting convection levels

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 176, 1965. Voprosy fiziki oblakov i aktivnykh vozdeystviy (Problems in cloud physics and active modification), 60-68

TOPIC TAGS: weather forecasting, cloud, air mass, frontal zone

ABSTRACT: The analysis of vertical velocities by layers in the atmosphere is considered as a means of determining conditions of clouds and of predicting future conditions. Changes in kinetic energy of a unit mass of air in a cloud as the air rises through a series of layers from base to top of the convective zone may be expressed by

$$\Delta\left(\frac{v^2}{2}\right) = \frac{g}{6} \frac{\Delta H}{T_0} \sum_{i=1}^n |(T_i - T) - S_0(T_i - T)|,$$

where g is gravitational acceleration, T_0 is air temperature at base of cloud, T

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the air temperature at upper boundary of the kth layer, T_b and T_c the temperature acquired by the air as it rises to the upper boundary of the layer (for wet and dry adiabatic stages respectively), v is the vertical velocity of the stream in the cloud at a height ΔH above the base, ΔH is the thickness of the kth layer, and S_0 represents the number of clouds of the given thickness. For a single cloud mass the expression is greatly simplified to

$$\Delta\left(\frac{v^2}{2}\right) = \frac{1.635 \Delta H}{T_0} \sum_{k=1}^n (T_0 - T_k)$$

Radiosonde data were used to construct graphs for maximum velocities during nighttime and daytime hours. These graphs were made for different situations: for weather entirely within a single air mass, for weather at a cold, closed front, and for intermediate conditions. It was found that computations from nighttime data agree with actual daytime values only in restricted situations. Differences between predicted values of maximum velocity within a mass and in the frontal zone are greatest at low values of maximum velocity and become vanishingly small at large values. Corrections may be made by using the graphs and may thus improve the predictability. It is concluded that the best prediction of possible maximum velocities of convective movements above any actual region may be made by using

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nighttime radiosonde data (3:00 a.m.) and a predicted daytime maximum temperature to compute maximum velocity at a level where $\sum_{k=1}^n (T_B - T)$ is a maximum, and then to resolve what synoptic position is expected in this region for the period of maximum convection during the day (generally 1:00 to 5:00 p.m.). The proper value is then selected from the above-indicated graph, corresponding to the computed value. Orig. art. has: 2 figures and 3 formulas.

ASSOCIATION: Glavnaya geofizicheskaya observatoriya (Main Geophysical Observatory)

SUBMITTED: 00

ENCL: 00

SUB CODE: ES

NO REF SOV: 006

OTHER: 001

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L 27292-66 EWT(1)/FCC GW

ACC NR: AR6014571

SOURCE CODE: UR/0169/65/000/011/B066/B066

AUTHOR: Budilova, Ye. P.; Lenshin, V. T.

23
B

TITLE: Mapping of maximum vertical velocities in clouds in connection with forecasting convection conditions

SOURCE: Ref. zh. Geofizika, Abs. 11B446

REF SOURCE: Tr. Gl. geofiz. observ., vyp. 176, 1965, 60-68

TOPIC TAGS: atmospheric convection, atmospheric temperature, atmospheric stratification, cloud

ABSTRACT: Results of using the layer method to analyze synoptic and aerological data are presented. Based on quantitative evaluation of the maximum values of vertical movements conditioned by temperature stratification at different synoptic positions, forecasts were made of the potential activity of tropospheric layers relative to anticipated convection conditions over large areas in the middle of the day. [Translation of abstract.] [NT]

SUB CODE: 04/ SUBM DATE: none

Card 1/1 CC

UDC: 551.515.4

2

Condition of alumina in molten slags. O. A. FEIN AND R. V. BUDILOVA. *Doklady Akad. Nauk S.S.S.R.*, 91 (5) 1187-90 (1963). The $\text{SiO}_2\text{-Al}_2\text{O}_3\text{-(CaO+MgO)}$ diagram with curves of equal values of e.m.f. is divided into two regions by the line through the "elbow points" of the curves. In one region, where Al_2O_3 and SiO_2 predominate, the aluminum is mostly in the cation form; in the other region, which is rich in CaO, the aluminum is in the form of anions. B.Z.K.

BUDILOVA, YE V.

USSR/Biology - Radiation Effects, Isotopes 11 Aug 53

"The Problem of the Mechanism of the Action of Penetrating Radiation on the Synthesis of Nucleoproteids in the Spleen," A. M. Kuzin, Ye V. Budilova, Inst of Biol Physics, Acad Sci USSR

DAN SSSR, Vol 91, No 5, pp 1183-1186.

Max inclusion of P^{32} into the protein fraction of the rat spleen and max suppression of this inclusion by irradiation immediately preceding injection of P^{32} phosphate occurred 19-20 hrs after the injection. Irradiation of the head of rats with

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X-rays (1000 r) had little effect on the inclusion of P^{32} into spleen nucleoproteids. Suppression of P^{32} inclusion by 60-65% occurred when the spleen was irradiated directly with X-rays (1000 r), but the rest of the body shielded with lead. Suppression by 20% occurred when the spleen was shielded with lead, but the rest of the body irradiated. Presented by Acad A. I. Oprin 18 Jul 53.

BUDILOVA, E. V.

USSR/Medicine - Physiology

Card 1/1 : Pub. 22 - 20/44

Authors : Kuzin, A. M.; and Budilova, E. V.

Title : Effect of ionizing radiation on the structural viscosity of nucleic acid of the brain and a spleen

Periodical : Dok. AN SSSR 98/6, 961-964, October 21, 1954

Abstract : Experiments, which were intended to determine how ionizing radiation effects the change in the structural viscosity of nucleic acid taken from the brain and spleen of live animals, are described. Four references; 1 U.S.S.R. (1946-1953). Graphs.

Institution : Institute of Biological Physics of the Acad. of Scs. of the USSR.

Presented by: Academician L. S. Shtern, June 7, 1954.

KUZIN, A.M.; BUDILOVA, Ye.V.

Change in the structural viscosity of nucleic acids of the brain
and spleen under the effect of ionizing radiation. Trudy Inst.biol.
fiz. no.1:79-83 '55.

(DESOXYRIBONUCLEIC ACID) (BRAIN)

(MIRA 9:9)

(SPLEEN) (RADIATION--PHYSIOLOGICAL EFFECT)

BUDILOVA, YE. V.

✓ The coenzyme of thiaminase. R. I. Tatarskaya, E. V. Budilova, and P. I. Pavlov (A. N. Bakh Inst. Biochem., Acad. Sci. U.S.S.R., Moscow). *Biokhimiya* 20, 554-65 (1955).—The expl. procedures for the quant. estn. of co-thiaminase consisted of a modification of procedures previously described (Tatarskaya, *et al.*, *C.A.* 47, 300.). The co-thiaminase was purified electrophoretically. The stability of the co-thiaminase and its resistance to strong hydrolytic action by acids and alkalis was confirmed. Various comparatively simple N substances found in tissue exts. can act as co-thiaminases. That such N substances are not all alike was indicated by the differences with which they were pptd. by phosphotungstic acid and by K bismuthiodide. They also have different functional structural groupings and migrate electrophoretically to different poles. Some thiaminases possess the property of forming active complexes not only with org. but with inorg. N compds. as well, e.g. thiaminase of the *Edentata* will complex with salts of NH_4 . The question of the presence or absence of specific thiaminase coenzymes in uninjured cells cannot be answered unequivocally. B. S. Levine

Budilova, E. V.

USSR / General Biology - Physical and Chemical Biology. B

Abs Jour: Ref Zhur-Biol., No 9, 1958, 37914.

Author : Kuzin, A. M. Budilova, E. V.

Inst : Not given.

Title : Sensitization of Radiolytic Depolymerization of
Desoxyribonucleic Acid.

Orig Pub: Biofizika, 1956, 1, No 1, 57-59.

Abstract: Increasing the pH of the medium from 7 to 8.6 reduced depolymerization of DNA obtained from calf cervical gland, when an 0.2% solution was subjected to x-irradiation. Of Cl, I, Mg, Co, and Fe ions in a concentration of $3.3 \cdot 10^{-4}$ M (FeCl₃), only the addition of Fe caused a considerable sensitization of DNA and the Depolymerization activity of ionizing radiation: when DNA solutions were irradiated by 5000 r in the presence of Fe, a complete loss of viscosity was

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USSR / General Biology - Physical and Chemical Biology. B

Abs Jour: Ref Zhur-Biol., No 9, 1958, 37914.

Abstract: noted; without Fe, there was a partial loss, but a distinct change in structural viscosity appeared only at 20,000 r. The authors point out the important role of the oxidizing radicals HO_2 which form in irradiation; evidently, the processes of DNA depolymerization which occur in irradiated tissues are also conditioned by HO_2 radical formation, which oxidize DNA in the presence of Fe traces.

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BUDILOVA, Ye.V.

BUDILOVA, Ye.V.; KUZIN, A.M.

Disintegrating effect of ionizing radiation on desoxyribonucleo-
protein filaments [with summary in English]. Biofizika 2 no.4:
476-479 '57. (MIRA 10:9)

- n.
1. Institut biologicheskoy fiziki Akademii nauk SSSR, Moskva
(NUCLEOPROTEINS) (X RAYS--PHYSIOLOGICAL EFFECT)

57-57

AUTHORS: Kuzin, A. M., Budilova, Ye. V. 30V/20-120-2-39/63

TITLE: On the Ability of Desoxyribonucleic Acid to Stimulate Oxidative Phosphorylation Following Irradiation (O sposobnosti dezoksiribonukleinovoy kisloty stimulirovat' okislitel'noye fosforilirovaniye posle oblucheniya)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 2, pp. 361 - 363 (USSR)

ABSTRACT: It was proved in numerous works that in different tissues the process of oxidative phosphorylation is disturbed under the influence of ionizing radiation. This manifests itself in the reduced ability of the respective tissue to form phosphorus compounds rich in energy (References 1-5 and others). Further it is known that the synthesis of nucleic acids and their structure is disturbed by irradiation. ~~That they are the most radio-sensitive~~ systems of the living cell, among them above all desoxyribonucleic acid (DNA). The problem arises whether a connection exists between the changes of these two systems. It was interesting to investigate the dependence of the change of oxidative phosphorylation in the tissues of an irradiated animal on the presence of

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On the Ability of Desoxyribonucleic Acid to Stimulate 30720-120-2-39/63
Oxidative Phosphorylation Following Irradiation

a native high-polymer DNA. For comparison the influence of the DNA injured by ionizing radiation upon the same process was followed. White rats were used for this. In the series of experiments I with liver-preparations of the non-irradiated control animals the level of oxidative phosphorylation under given conditions was determined (figure 1 A). An addition of DNA to this suspension of "mitochondria" which contained a small amount of normal nuclei did not lead to any change of this level. In series II (figures 1-3 B) it was determined that the irradiation of rats with X-rays (dose 1000 r) leads to the suppression of oxidative phosphorylation in the suspension of "mitochondria" which was produced of the liver of these animals 24 hours after irradiation (in agreement with reference 5). The respiration of the tissue was not changed in this connection (figure 3 B), whereas the binding of inorganic phosphorus and the ratio P/O on the average was reduced more than 3-fold (figures 1 B, 2 B). In the next series DNA was added and in the last series DNA irradiated 24 hours before the experiment by γ -rays of Co^{60} (100 000 r). On the basis of the obtained results it can be said that the native non-irradiated DNA is

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On the Ability of Desoxyribonucleic Acid to Stimulate *SV*/20-120-2-39/63
Oxidative Phosphorylation Following Irradiation

able to stimulate the oxidative phosphorylation in a mitochondria-suspension of the liver of irradiated animals. The irradiation of the DNA-solution which leads to its depolymerization and partial destruction annuls the last-mentioned influence of DNA. Further may be seen from it that still undetermined bindings exist between the nuclear DNA and the oxidative phosphorylation of mitochondria. The assumption becomes probable that the change of nucleic acids is in connection with a simultaneously occurring disturbance of the oxidative phosphorylation in the irradiated cells. There are 3 figures and 9 references, 3 of which are Soviet.

ASSOCIATION: Institut biologicheskoy fiziki Akademii nauk SSSR (Institute of Biological Physics, AS USSR)
PRESENTED: January 21, 1958, by L. S. Shtern, Member, Academy of Sciences, USSR
SUBMITTED: January 15, 1958

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On the Ability of Desoxyribonucleic Acid to SOV/20-120-2-39/63
Stimulate Oxidative Phosphorylation following Irradiation

1. Nucleic acids--Synthesis
2. Nucleic acids--Effects of radiation
3. Phosphorus compounds--Production
4. Tissues (Biology)---Effectiveness
5. Animals--Test results

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BUDILEVA, YE. V. (USSR)

"The Effect of Radiation on DNA Synthesis in Isolated
Thymus Nuclei."

Report presented at the 5th International Biochemistry Congress,
Moscow, 10-16 August 1961

BUDILOVA, Ye.V.

Effect of gamma irradiation on the synthesis of desoxyribonucleic acid in isolated cell nuclei of the thymus gland. Report No.1: Incorporation of formate-S¹⁴ and adenine-C¹⁴ into nitrogenous bases of desoxyribonucleic acid of isolated nuclei. Radiobiologiya 1 no.3:333-335 '61. (MIRA 14:10)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(CELL NUCLEI) (DESOXYRIBONUCLEIC ACID)
(FORMATES) (ADENINE)

27 1220 also 2209

32746
S/205/61/001/006/006/022
D268/D305

AUTHORS: Kuzin, A.M., Agustini, Ch., Kopylov, V.A., and
Budilova, Ye.V.

TITLE: On the effect of extracts from irradiated *Vicia faba*
leaves on the P^{32} incorporation in isolated thymus
cell nuclei

PERIODICAL: Radiobiologiya, v. 1, no. 6, 1961, 856 - 857

TEXT: In further studies on the effect of biologically active compounds accumulating in irradiated plants on nucleic acid synthesis in the cell nucleus, the action of extracts from irradiated and non-irradiated *V. faba* leaves on the phosphorylization processes in the isolated cell nucleus was studied, using the same irradiation and method for preparing the extracts as previously described by A.M. Kuzin et al. (Ref. 7: Tr. konf. po mekhanizmam pervichnogo deystviya ioniziruyushchey radiatsii, Kiyev (Transactions of the Conference on the Mechanisms of the Initial Action of Ionizing Radiation, Kiyev) 1961, in the press). Cell nuclei were isolated from the thymus of young rats by the Allfrey and Mirskiy method (Ref. 9: Card 1/3

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S/205/61/001/006/006/022

D268/D305

On the effect of extracts from ...

Proc. Nat. Acad. Sci., 40, 881, 1954) and were then suspended in an 0.25 M saccharose solution with 0.0018 M CaCl_2 . After incubation at 20°C for 3 hours, the suspension was centrifuged, and the nuclei finally extracted. The resulting alkali extract was used to determine radioactivity and the quantity of DNA according to the method of Burton (Ref. 10: Biochem. J., 62, 315, 1956). Preliminary experiments showed that when the boiled nuclear suspension was incubated with $\text{Na}_2\text{HP}^{32}\text{O}_4$ radioactive P was not included in the fraction studied, indicating that the alkali hydrolyzate was completely free from inorganic radioactive P. Results showed that nuclei incubated with extract from irradiated plants were less likely to incorporate P^{32} than was the case with non-irradiated, the average difference being 40 %. Extracts from irradiated plants as compared with non-irradiated, therefore, gave greater inhibition of the phosphorylization processes. There are 1 table and 10 references: 8 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: V.G. Allfrey, Proc. Nat. Acad. Sci., 40, 881, 1954; K. Burton, Biochem. J., 62, 315, 1956.

Card 2/3

On the effect of extracts from ...

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S/205/61/001/006/006/022
D268/D305

ASSOCIATION: Institut biologicheskoy fiziki AN SSSR, Moskva (Institute of Biological Physics, AS USSR, Moscow)

SUBMITTED: July 18, 1961

X

Card 3/3

BUDILOVA, Ye.V.

Effect of gamma irradiation on the synthesis of DNA in isolated cellular nuclei of the thymus gland. Report No.2: Comparative examination of the synthesis of DNA in the nuclei of the thymus gland following irradiation of isolated nuclei and total irradiation of animals. Radiobiologiya 2 no.1:33-35 Ja '62

(MIRA 18:1)

BUDILOVICH, A.

Technical and economic indices of plans of completely precast
public buildings. Zhil. stroi. no.12:4-6 '62.
(MIRA 16:1)

1. Glavnyy inzh. sektora Nauchno-issledovatel'skikh
obshchestvennykh zdaniy Akademii stroitel'stva i arkhitektury
SSSR.

(Architecture--Designs and plans)
(Precast concrete construction)

VORONKO, A., inzh.(g.Vil'nyus); BUDILOVSKIY, Yu., inzh.(g.Vil'nyus)

Rapid method of determining the degree of acidity in solutions.
Prom.koop. 13 no.5:11 My '59. (MIRA 12:9)

1. Artel' "Stakhanovets".
(Chemical tests and reagents)

BUDILOVSKIY, Yu., inzh.; VORONKO, A., inzh.

Firing anodic oxidation coatings. Prom.koop. 14 no.9:15-16 S
'60. (MIRA 13:9)

1. Artel' "Spalis", g.Vil'nyus.
(Metals--Finishing)

(Aluminum)

27075
S/080/61/034/003/001
A057/A129

1.1800 1087 2808 also 1454

AUTHORS: Budilovskiy, Yu. Ya., Voronko, A. A.

TITLE:

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 3, 1961, 691 - 692

TEXT: A new composition of a bath for surface-degreasing of aluminum articles with precise dimensions before anodizing was developed. A. V. Shreyder [Ref. 1: ZhPKh, 30, 1 (1957)] and P. N. Petrov et al. [Ref. 2: Sb. "Progressivnaya tekhnologiya priborostroyeniya" ("Advances in Technology of Instrumentation"), 4, Mashgiz, M. (1955)] suggested organic solvents for degreasing precisely dimensioned aluminum articles before anodizing, since treatments with alkali or acid solutions change dimensions of the surface. Treatment by organic solvents only are insufficient, because after it a fine grease film remains on the aluminum surface and an additional chemical or electrochemical treatment is necessary. Alkali solutions containing water glass as inhibitor are suggested by V. I. Layner et al. [Ref. 3: Osnovy gal'vanostegii (Principles of electroplating), Metallurgizdat, M. (1953)], but observed also that a thorough washing is necessary, otherwise silica gel may be observed on the surface effecting failures in anodizing of the aluminum articles.

News in anodizing of aluminum parts with ...

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A057/A129

The present authors developed a new composition for chemical degreasing of aluminum surface before anodizing. The composition is patented with USSR patent no. 123822; Bulletin for patents no. 21 (1959) and has the following property: NaH_2PO_4 + Na_2HPO_4 10 - 15 g/l, ON-10 (OP-10) (polyethyleneglycolester) 3 - 4, temperature 80 - 95°C, pH 5.5 - 7.5. ON-7 (OP-7) can be used also as emulsifier, but OP-10 is better soluble in the given solution. The solution can be prepared from sodium hydroxide or trisodium phosphate by adding phosphoric acid until the necessary pH is attained. Duration of the degreasing procedure depends on the contamination of the surface, but is usually 5 - 25 minutes. Increase in temperature and agitation accelerates the process; ultrasonic waves improve the procedure. An advantage of the present bath is the fact that a buffer solution is used in the pH range where no etching of aluminum occurs. The gloss of the aluminum surface is not decreased by the procedure and the simple composition of the solution allows for an easy control. The control is carried out by measuring the pH, estimating the wetting ability and by the conventional method for determination of phosphates. There is 1 figure and 7 references: 5 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: A. K. Graham, Electroplating Engineering Handbook, New York (1955); K. E. Langford. Analysis of electroplating and

Card 2/3

News in anodizing of aluminum parts with...

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S/080/61/034/003/017/017
A057/A129

related solutions, Teddington MIDDLESEX, England (1951).

ASSOCIATION: Kafedra fizicheskoy khimii Vil'nyusskogo gosudarstvennogo universiteta
(Department for Physical Chemistry of the Vil'na State University)

SUBMITTED: July 12, 1960

Card 3/3

BEROVIC, Z, prim. dr.; NIKOLIC, J., dr.; KICEVAC, A., dr.; BUDIMIR, A., dr.

The problem of sacro-ileitis. Reumatizam 12 no.2:48-53 '65

1. Institut za reumatizam SR Srbije, Beograd.

MIJUSKOVIC, B.; BUDIMIR, M.; MARTINIS, .U.

Primary diffuse interstitial pulmonary fibrosis. Tuberkuloza 15 no.3:460-467 JI-D*63.

1. Institut za tuberkulozu SR Srbije, Beograd. Direktor: prof.dr. Milic Grujic.

S

LABAN, M.; HUDIMIR, M.; MIJUSKOVIC, B.; SPASIC, P.; MAKSIMOVIC, B.;
MIKOVANOVIC, M.

Spirometric apneic coefficients. Acta med. iugoslavl. 15 no.1:
20-42 '61.

1. Institut za tuberkulozu Narodne Republike Srbije u Beogradu.
(SPIROMETRY)

IABAN, M.; BUDIMIR, M.; MIJUSKOVIC, B.; SPASIC, P.

Respiratory function in various positions of the body. Acta med.
iugoslavl. 15 no.1:1-19 '61.

1. Institut za tuberkulozu Narodne Republike Srbije u Beogradu.
(RESPIRATION physiol) (POSTURE)

MIJUSKOVIC, Branislava; BUDIMIR, Milan

Development of emphysema and chronic cor pulmonale in tuberculous patients. Tuberkuloza 16 no.5:506-511 S-D '64

1. Institut za tuberkulozu SR Srbije (Direktor: prof. dr. Milic Grujic).

BUDIMIR, Milica

Treatment of systemic lupus erythematosus. Srpski ark. celok.
lek. 92 no.9:853-859 S'64.

1. Dom narodnog zdravlja "Boris Kidric" u Beogradu (Upravnik:
prim. dr. Zagorka Berovic).

BEROVIC, Zagorka; BUDNIR, Milica; RADOJICIC, Vladimir.

Plasma protein changes in patients with rheumatoid arthritis.
Srpski arh. celok. lek. 92 no.11:1073-1077 N'64.

1. Centar za reumatizam Poliklinike "Boris Kidric" u Beogradu
(Upravnik: prim. dr. Zagorka Berovic); Mikrobioloski institut
Medicinskog fakulteta Univerziteta u Beogradu (Upravnik:
prof. dr. Milutin Djurisia).

LJUBISAVLJEVIC, Sava; BUDIMIR, Spiro

Current status of tuberculosis among students of the Belgrade University according to a radiophotographic survey. Srpski arh. celok. lek. 89 no.2:139-151 F '61.

1. Institut za tuberkulozu NR Srbije u Beogradu. Direktor* prof. dr Milic Grujic.

(TUBERCULOSIS PULMONARY statist)

BUDIMIROVIC, M.

BUDIMIROVIC, M.

The study of drinking water in Western Serbia. Glas .hig.inst.,
Beogr. 4 no.1-2: 57-65 Jan-June '55.

(WATER SUPPLY,

in W. Serbia, Yugosl., sources & future problems(Ser))

BUDIMIROVIC, Mila

Examination of waters of Valjevo. Glasn. hig. inst., Beogr.
4 no.3-4:105-112 July-Dec 1955.

(WATER SUPPLY
in Yugosl. (Ser))

JANKOV, Lj., Mr.; DORDEVIC, S., dr.; ~~BUDIMIROVIC, M., mr.~~; KOLARIC, M., dr.

Study of sanitary conditions of Sava and Danube near Belgrade.
Higijena, Beogr. 7 no.1-4:546-561 1955.

1. Higijenski institut NRS, Beograd.
(WATER

pollution of Sava & Danube rivers near Belgrade (Ser))

BUDIMIROVICH, M.

YUGOSLAVIA / Chemical Technology. Chemical Products H-5
and Their Application. Water treatment.
Sewage water

Abs Jour : Ref. Zhur. - Khimiya, No 2, 1958, No 5096

Author : Gligoriyevich J., Budimirovich M., Khrgovich N.

Inst : Not Given

Title : Effect of Ultrasound (Frequency 800 Kilohertz/
Second) on Oxidability of Drinking Water

Orig Pub : Acta veterin., 1956, No 1, 43-48

Abstract : Samples of Belgrad tap water were subjected to
the action of ultrasound (US) of frequency 800
kilohertz/second and an intensity of 0.5-1.25
watt/cm², for 3-20 minutes. It was found that

Card : 1/2

YUGOSLAVIA / Chemical Technology. Chemical Products H-5
and Their Application. Water treatment.
Sewage water

Abs Jour : Ref. Zhur. - Khimiya, No 2, 1958, No 5096

Abstract : after exposure to US the oxidability of the
water is increased, reaching a certain maximum.
The pH of the water is not changed. The assump-
tion is made that US acts on coarsely dispersed
admixture of the water causing their dispersion.

Card : 2/2

BUDIMIROVIC-STANOJEVIC, Mila

Use of water in Leskovac. Glasn. Hig. inst., Beogr. 6 no.1-2:34-40
Jan-June 57.

(WATER SUPPLY,
in Yugosl. (Ser))

11

STANOVICH
CATEGORY : Yugoslavia

h-5

ABST. JOUR. : RZhKhim., No. 20 1959, No. 71852

AUTHOR : Sudimirovich-Stanovich

INST. : Institute of Hygiene

TITLE : Problems of Water Supply and Sewage Treatment
at "Zorka" Chemical Enterprise in Shabats

ORIG. PUB. : Glasnik Khig. in-ta, 1959, 7, No 2, 39-52

ABSTRACT : No abstract.

CARD:

BUDIMIROVIC-STANOJEVIC, M.

Production of oxygen in stagnant water. Higijena 13 no.2:146-155
'61.

(WATER SUPPLY)

BUDIMLIC, Borislav; DUMANOVIC, Dragica

Iodometric determination of novalgin. Glas Hem dr 27 no.5/6:
293-298 '62.

1. Research Laboratory in the Field of Pharmaceutical and Organic
Chemistry "Galenika", Zemun.

BUDIN, A., inzh.

Construction of passenger piers in the Kiev harbor. Rech.transp.
19 no.9:37-38 S '60. (MIRA 13:9)
(Kiev--Harbor) (Piers)

BUDIN, A., inzh.

Embankments in the form of trestle bulwarks. Rech. transp. 21
no. 1:39-41 Ja '62. (MIRA 16:8)

(Embankments)

BUDIN, A., kand.tekhn.nauk

Field study of a trestle-bulwark type quay. Rech.transp.
23 no.9:49-51 S '64. (MIRA 19:1)

BUDIN, A.Ya., insh.

Use of reinforced concrete I beam piles for the construction
of harbors. Rech. transp. 17 no.3:29-30 Mr '58. (MIRA 11:4)
(Harbors) (Concrete piling)

BUDIN, A.Ya., insh.

~~Mooring wharf~~ Mooring wharf made of precast reinforced concrete. Rech.transp.
17 no.9:56-57 S '58. (MIRA 11:11)
(Wharves)

BUDIN, A.Ya., inzh.

Operational experience with oblique structures. Rech.transp. 18
no.6:48-50 Ja '59. (MIRA 12:9)
(Shore protection)

BUDIN, A.Ya., inzh.; TSINKER, G.P., inzh.

Using a T-shaped reinforced concrete sheet pile in harbor construction. Trudy LIIVT no.26:135-142 '59. (MIRA 14:9)
(Sheet piling) (Harbors) (Concrete piling)

BUDIN, A.Ya., inzh.

Modeling of retaining walls. Trudy LIVT no.47:3-10 '63.
(MIRA 17:9)

BUDIN, A.Ya., kand. tekhn. nauk

Rheological models and equations of state in the calculation of
kinematic factors. Trudy LIVT no.66:39-48 '64.

(MIRA 19:2)

Budin, I.

1. BUDIN, I., SMEKHOV, M.

2. USSR (600)

4. Cement Industries

7. Cleaning flue gases with centrifugal scrubbers. TSement 18, No. 1, 1952

9. Monthly List of Russian Accessions, Library of Congress, June 1952, UNCLASSIFIED.
Amvrosiye~~vskiy~~ Tsementnyy Zavod

BUDIN, I.

Fuel Abstracts
June 1954
Atmospheric Pollution

✓ 4822. PURIFICATION OF FINE GASES WITH HOT GAS-WASHER.
and Budin, I. (Silent Tech., 1953, vol. 4, 228). Smolow, H.

9-28-54
8/19

BUDIN, I.

SMEKHOV, N.; BUDIN, I.

Cement Kilns

Use of scrubbers for washing flue gases of automatic shaft furnaces. TSement
19, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

BUDIN, I.K.

SUBJECT: USSR/Cement loading Device

101-4-8/13

AUTHOR: Budin, I.K. (Amvrosiyevka)

TITLE: A New System for Unloading Cement from Silos (Novaya sistema razgruzki tsementa iz silosov)

PERIODICAL: Tsement , 1957, # 4, pp 26-28, (USSR)

ABSTRACT: The loading of cement from silos into RR cars by means of Blower chutes equipped with special air plates does not meet modern requirements, insofar as this system has several disadvantages and inadequate efficiency. Since 1955, a new cement loading device, proposed by N.L. Kovalenko, has been in operation at the Novo-Amvrosiyev Cement Plant. The new device operates on the system of aerated cement forced by a pressure of 2.5 atmospheres into RR cars. Loading time varies from 12-15min for a 60-ton car, by using 10 cu m of compressed air per silo.

The article contains 4 figures

INSTITUTION: Amvrosiyevka Cement Kombinat (Amvrosiyevskiy tsementnyy kombinat)

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress

Card 1/1

BUDIN
BUDIN, I.K., inzh.

Grooved-roll press for briquetting. TSement 23 no.6:25-26
H-D '57. (MIRA 11:1)

1. Amvrosiyevskiy tsementnyy kombinat.
(Briquets (Fuel))
(Cement industry--Equipment and supplies)

Budin, Josko

Yugoslavia/Radiophysics - Application of Radiophysical Methods, I-12

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35482

Author: Budin, Josko

Institution: None

Title: Separation Filter for Narrow-Band Superhigh Frequency Antenna

Original

Periodical: Elektrotehn. vesn., 1955, 9, No 11-12, 377-384; Serbian; English, French, and German resumes

Abstract: A separation filter for duplex communication in the 30-100 mc band is described. The filter consists of 4 series tuned circuits and 2 quarter-wave sections of h-f cable. The filter can also be used for simultaneous operations of 2 transmitters or receivers with a common antenna.

Card 1/1

BUDIN, Jozko, ing.

Aerial dividing network for two-way mobile radio (To be contd.).
Elektr vest 27 no.11/12:404-408, 35-a - 41-a N-D '59. (EBAI 10:1)

1. Industrija za alaktrozveze, Ljubljana.
(Radio)

BUDIN, Josko

Connecting hertzian-wave antennas with medium-wave transmitting
antennas. Telekomunikacije 9 no.3:21-24 J1 '60. (EEAI 10:1)

1. Industrija za elektrovezje, Ljubljana.
(Radio)

BUDIN, Josko, ing.

The tenna switch for duplex mobile stations. II. (Conclusion).
Elektr vest 28 no.3/5:89-94 Mr-Apr '60. (EEAI 10:5)

1. Industrija za elektrovezve, Ljubljana.
(Electric switchgear) (Antennas) (Radio)

EUDIN, K.A., kandidat sel'skokhozyaystvennykh nauk.

Hogging off potato fields. Nauka i pered.op. v sel'khoz. 7
no.8:8-9 '57. (MLRA 10:9)

1. Nauchno-issledovatel'skiy institut kartofel'nogo khozyaystva.
(Swine--Feeding and feeding stuffs)

BUDIN, K. Z.

Selection and rejection of young potato seedlings. Sel. i sem., No 4, 1952.

BUDIN, K. Z.

High potato yield on the collective farm "Power of the Soviets." Sad i
og. No 5, 1952.

BUDIN, K. Z.

Potatoes

Types of potatoes for irrigation agriculture. Sad 1 og. no. 6, 1952.

Monthly List of Russian Accessions. Library of Congress, November 1952.
Unclassified.

Budin. K. Z.
2217 Budin. K. Z. and Fleshakov. V. I.

(*potato*)
Vyrashchivaniye Kartofyelya V Poymakh Stalingradskoy Oblasti. Stalingrad,
Kn. IZD. 1954, 48s 20sm. 3.000 EKZ. 65K.-
(54-56532)p

635.2(47.874)

BUDIN, K.Z., kandidat sel'skokhozyaystvennykh nauk.

Sowing grain and other crops, planting potatoes and setting out seed beds.
Est. v shkole no.2:57-60 Mr-Apr '56. (MIRA 9:7)

1.Nauchno-issledovatel'skiy institut kartofel'nogo khozyaystva.
(Sowing) (Vegetable gardening)

BRENIK, Premysl, prof., dr., inz.; KROUPA, J., doc., inz.; HALA, F.; BUDIN, M., inz.; JERIE, J., inz., dr.; BELIK, inz., C.Sc.; KACER, inz.; BUKOVSKY, J., prof.; KUNES, J., inz.; MARCELLI, V., dr., inz.; VILD, B.; EMINGER, Z., Dr.Sc.; SKARECKY, inz.; DRAHY, J., inz.; MASEK, J., inz.; DOLEZAL, inz.; URBANEK, J., inz., C.Sc.; JUZA, dr., inz.; BEQVAR, Josef, prof., inz.; KRAL, V., inz.; BALOS, inz.; KELLAR, J.; POSPISIL, J., inz.

A conference on heavy-duty steam and gas turbines in Plzen. Energetika Cz 11 no.5:259-262 My '61.

1. Vysoka skola strojni a elektrotechnicka, Plzen (for Brenik, Bukovsky and Becvar). 2. Ministerstvo tezkeho strojirenstvi (for Kroupa). 3. Ceskoslovenska akademie ved (for Pospisil). 4. Leninovy zavody, Plzen (for Hala, Marcelli, Belik, Vild, Eminger, Drahý, Masek, Urbanek, Juza, Kral and Dolezal). 5. Prvni brnenska strojirna, Zavody Klementa Gottwalda (for Budin and Balos). 6. Statni vyzkumny ustav tepelne technicky (for Jerie, Kacer and Skarecky). 7. Glen korespondent Ceskoslovenske akademie ved (for Jerie and Juza).

BUDIN, V.

Studying ~~new~~ machinery. Prof.-tekh.obr. 18 no.11:5-6 N '61.
(MIRA 14:11)

1. Zamestitel' direktora po uchebno-proizvodstvennoy rabote
remeslennogo uchilishcha No.14, Tashkent.
(Mechanical engineering--Study and teaching)

Budin, V.K.

- 24(0); 5(4); 6(2) PHASE I BOOK EXPLOITATION SOV/2215
Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii imeni D.I. Mendeleeva
- Referaty nauchno-issledovatel'skikh rabot; sbornik No. 2 (Scientific Research Abstracts; Collection of Scientific Papers, No. 2) Moscow, Standartgiz, 1958. 139 p. 1,000 copies printed.
- Additional Sponsoring Agency: USSR. Komitet standartov, mer i izmeritel'nykh priborov.
- Ed.: S. V. Reshetina; Tech. Ed.: M. A. Kondrat'yeva.
- PURPOSE: These reports are intended for scientists, researchers, and engineers engaged in developing standards, measures, and gauges for the various industries.
- COVERAGE: The volume contains 128 reports on standards of measurement and control. The reports were prepared by scientists of institutes of the Komitet standartov, mer i izmeritel'nykh priborov pri Sovete Ministrov SSSR (Commission on Standards, Measures, and Measuring Instruments under the USSR Council of Ministers). The participating institutes are: VNIIM - Vsesoyuznyy nauchno-issledovatel'skiy metrologii imeni D.I. Mendeleeva (All-Union Scientific Research Institute of Metrology imeni D.I.-Mendeleeva) in Leningrad; Sverdlovsk branch of this institute; VNIIX - Vsesoyuznyy nauchno-issledovatel'skiy institut komiteta standartov, mer i izmeritel'nykh priborov (All-Union Scientific Research Institute of the Commission on Standards, Measures, and Measuring Instruments), created from MGIMIP, Moskovskiy gosudarstvennyy institut mer i izmeritel'nykh priborov (Moscow State Institute of Measures and Measuring Instruments), created and Measuring Instruments) October 1, 1955; VNIIPRI - Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy (All-Union Scientific Research Institute of Physicotechnical and Radio-engineering Measurements) in Moscow; MGIMIP - Kharkovskiy gosudarstvennyy institut mer i izmeritel'nykh priborov (Kharkov State Institute of Measures and Measuring Instruments); and MGIMIP - Novosibirskiy gosudarstvennyy institut mer i izmeritel'nykh priborov (Novosibirsk State Institute of Measures and Measuring Instruments). No personalities are mentioned. There are no references.
- Frequency Service
- Artem'yeva, Ye. V. (VNIIPRI). ISCh-1 and ISCh-2 Type Instruments for Integral Comparison of Electric Oscillation Frequencies 51
- Vasilenko, A. D., and V. K. Budin (Deceased). (VNIIM). Automatic Apparatus for Controlling the Frequency Comparator Unit of Generators 52
- Fally, G. N. (VNIIPRI). Standard Frequency Meter (for checking purposes) for Frequency Transmission Through a High-power Short-wave transmitter 53
- Bryzhev, L. D., A. Ya. Leykin, I. V. Baulin, and Ye. Z. Orlov (MGIMIP). Determining the Frequency Values of 3-3 Ammonia Absorption Lines 54
- Hardness and Strength Requirements (Dolinskii, Ye. P., Candidate of Technical Sciences) Savitskiy, P. S., and I. A. Zakharov (Sverdlovsk Branch of VNIIM). Card 11/2

S/184/62/000/004/004/006
D040/D113

AUTHORS: Besednyy, V.A., Strelets, L.A., and Budin, V.N., Engineers

TITLE: Welding KhN78T steel

PERIODICAL: Khimicheskoye mashinostroyeniye, no. 4, 1962, 30-33

TEXT: The XH78T (ЭИ-435) (KhN78T [EI-435]) steel is a nichrome grade (20% Cr, 80% Ni) used in thin-sheet structures for service at up to 800°C. It has a high gas corrosion resistance at 1100°C but relatively low strength at high temperatures despite additions of 0.15-0.35% Ti and up to 0.15% Al, and has a tendency to hot cracking and porosity during welding. The Sumskiy mashinostroyitel'nyy zavod im. Frunze (Sumy Machinebuilding Plant im. Frunze) uses KhN78T steel for welded cylindrical vacuum vessels and has developed welding techniques by which sound welds can be obtained in manual arc welding with and without argon. High-frequency a.c. is mostly used though d.c. can also be employed. Welding must be conducted with minimum current, a short arc, and without transverse oscillations of the electrode.

Card 1/2

Welding KhN78T

S/184/62/000/004/004/006
D040/D113

Contamination with oxygen, sulfur, phosphor, silicon, etc., must be avoided, every welded bead must be left to cool completely and be cleaned before welding the next one and the argon must be pure. The best wire for argon arc welding is X20H80T3 (Kh20N80T3) with high Ti and Al content; EX20H80 (EKH20N80) wire with HXC-13 (NZh-13) coating can be used for welding without argon. Weldments must be annealed at 1050-1100°C to relieve residual deformation. KhN78T can also be joined to 1X18HAT (1Kh18NDT) steel using austenitic 3A1M (3A1M) wire with MF-1 (MF-1) coating. Polygonization, grain growth at the fusion line and twinning of crystals is not fully eliminated. The chemical composition of the 3 welding wire grades used in experiments and the composition and mechanical properties of welds obtained with each, are tabulated. There is 1 figure and 3 tables.

Card 2/2